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10/539,128	02/06/2006	Samuel Boutin	273912US2XPCT	2712
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BHAT, ADITYA S	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/539,128	Applicant(s) BOUTIN, SAMUEL	
	Examiner ADITYA S. BHAT	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status

1. Claims 12-28 are currently pending.

Specification

2. Applicants amendments have been reviewed and the previous objections to the specification have been withdrawn in light of the amendments.

Claim Objections

Claim 12 is objected to because of the following informalities: the term "comprising" in line 2 should be amended and another term should be used in its place as it is unclear where the method steps actually begin. Further the amendment is unclear as which phrase applicant intended on using, the last two lines recite "the method" and "said method" Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Larsson et al. (USPN 2004/0133289) in view of Nerwin v. Erlichman, 168 USPQ 177, 179..

With regards to claim 12, Larsson et al. (USPN 2004/0133289) teaches a method for diagnosing functional faults of a functional architecture *comprising* functions for performing a service and associated with sensors and actuators that produce and consume data, said method comprising:

i) creating a list of particular values, (Page11, paragraph 0175)during which particular values corresponding to functional faults of the sensors and actuators(page 2, paragraph 0017, lines 14-15) are listed;

ii) creating a list of particular values(Page11, paragraph 0175) that permit propagation(flow) of an information stream relating to defects across the functions are listed; (Page1-2, paragraph 0009)

iii) formulating a functional diagnosis of the service based on the first and second lists of particular values; (Page11, paragraph 0184)and

iv) recording the particular values and their propagation on a memory device(22) for a tool provided for validation of the architecture. (Page11, paragraph 0184)

With regards to claim 13, Larsson et al. (USPN 2004/0133289) teaches after formulating of said functional diagnostic(iii), said method comprises a step of deducing an operational diagnosis of electronic architecture onto which said functions are mapped said electronic architecture comprising calculator, networks signal lines and connectors. (fig 17)

With regards to claim 14, Larsson et al. (USPN 2004/0133289) teaches creating the lists of said particular values is performed after mapping of the functions onto the electronic architecture. (Page11, paragraph 0175-0176)

With regards to claim 15, Larsson et al. (USPN 2004/0133289) teaches the particular values are correspond to at least one of the following values:

cut bus;

corrupted frame;

short circuit applied to a wire;

wrong contact applied to a connector of a strand, sensor, actuator or calculator; (page 5, paragraph 0067) and execution fault applied to a microcontroller.

With regards to claim 16, Larsson et al. (USPN 2004/0133289) teaches an said operational diagnosis for the service, the functional particular values associated with sensors, actuators, and the method further comprising a step of listing functions executing the service for at least one data flow between two functions, or between a sensor and a function, or between a function and an actuator, for which no functional particular value is defined for the flow, if an operational particular value is defined, then a new functional particular value is automatically determined for this at least one data flow. (Pages 1-2, Paragraph 009)

With regards to claim 17, Larsson et al. (USPN 2004/0133289) teaches listing undiagnosed feared incidents are listed to construct an analysis of functional safety of the functional architecture. (Page 10, paragraph 0167-0168)

With regards to claim 18, Larsson et al. (USPN 2004/0133289) teaches mapping onto a hardware architecture composed of calculators, networks, signal lines, and connectors, and mapping of functions onto the hardware architecture, the particular

values and feared incidents are listed according to the method, to deduce an analysis of functional safety of the resulting functional architecture. (fig 17-18)

With regards to claim 19, Larsson et al. (USPN 2004/0133289) teaches the functional architecture comprises an architecture with which a vehicle can be equipped. (Page 11, paragraph 0170) Whatever the engine driving is being interpreted as the vehicle.

With regards to claim 20, Larsson et al. (USPN 2004/0133289) teaches an analyzing feasibility and/or susceptibility to failure of functioning of the architecture and of establishment of an output indicating the feasibility and/or susceptibility to failure. (Page10, paragraph 0167)

With regards to claim 21, Larsson et al. (USPN 2004/0133289) teaches a commercial article provided with a computer-readable memory, a program executable by a computer being recorded in the memory for diagnosis of functional faults of a functional architecture, the program including encoding for:

i) determining and listing particular values (Page11, paragraph 0175) corresponding to functional faults of sensors and actuators(page 2, paragraph 0017, lines 14-15)

ii) determining and listing particular values (Page11, paragraph 0175) permitting propagation of information relating to these faults across the functional architecture; (Page1-2, paragraph 0009)

iii) forming the functional diagnosis of the service as a function of the lists obtained from the determining (i) and (ii); ((Page 5, paragraph 0070) and
iv) recording the particular values and their propagation on a memory(20) (Page 5, paragraph 0080)

With regards to claim 22, Larsson et al. (USPN 2004/0133289) teaches a data-processing tool programmed to perform the method for diagnosing functional faults of a functional architecture. (Page 5, paragraph 0072)

With regards to claim 23, Larsson et al. (USPN 2004/0133289) teaches a data-processing tool comprising a commercial article (Page 5, paragraph 0072)

With regards to claim 24, Larsson et al. (USPN 2004/0133289) teaches a particular values that permit propagation of said information relating to said functional faults of said sensors and actuators include a value associated with the presence of a connection fault (Page 5, paragraph 0106) between said sensors and actuators. (Page 2, paragraph 0017)

With regards to claim 25-27, Larsson et al. (USPN 2004/0133289) teaches various connection fault relating to a wire(communication link) between said sensors and actuators. (page 5, paragraph 0076)

With regards to claim 28, Larsson et al. (USPN 2004/0133289) teaches a particular values that permit propagation of said information relating to said functional faults of said sensors and actuators include a value associated with the absence of a connection fault between said sensors and actuators. (Table 1;Page 7, paragraph 0106)

5. Larsson et al. (USPN 2004/0133289) discloses the claimed invention except for creating multiple lists. It would have been obvious to one having ordinary skill in the art at the time the invention was made to separate the list taught by Larsson et al. in order to more easily process the data, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

Response to Arguments

6. Applicant's arguments with respect to claims 12-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Simkins (USPN 7,136,793) teaches a system and method for modeling a propagation and containment process.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

9. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S. Bhat whose telephone number is 571-272-2270. The examiner can normally be reached on M-F 9-5:30.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AB/
Examiner, Art Unit 2863
June 16, 2008

/John E Barlow Jr./
Supervisory Patent Examiner, Art
Unit 2863